

RENUMBERED
CLAIMS

37 CFR

1.126

6/19/06

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IN THE CLAIMS

Cancel claims 1-35 without prejudice.

Add claims 36-54 which follow:

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36. An isolated nucleic acid molecule which comprises a sequence encoding a protein which inhibits osteoclast differentiation from haematopoietic cell precursors, selected from the group consisting of osteoclast inhibitory lectin (OCIL) and OCIL-related protein, and which either

(i) hybridizes under conditions of moderate to high stringency to one or more nucleotide sequences selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 15, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 33, SEQ ID NO: 36, SEQ ID NO: 37, SEQ ID NO: 44, SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 11, SEQ ID NO: 21, and SEQ ID NO: 37; or

(ii) has greater than 80% sequence identity with one or more of the sequences set out in (i).

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37. The isolated nucleic acid molecule according to claim 36, which encodes a type II membrane protein.

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38. The isolated nucleic acid molecule according to claim 36 which is expressed at least by osteoblasts.

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39. The isolated nucleic acid molecule according to claim 36, which is of human, mouse or rat origin.

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40. The isolated nucleic acid molecule according to claim 36, which is cDNA.

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41. The isolated nucleic acid molecule according to claim 40 wherein said cDNA comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID

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NO: 15, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 33, SEQ ID NO: 36, SEQ ID NO: 44, SEQ ID NO: 45 and SEQ ID NO: 46.

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42. The isolated nucleic acid molecule according to claim ⁴⁰36, which is gDNA.

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43. The isolated nucleic acid molecule according to claim ⁴⁶42, wherein said gDNA comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 11, SEQ ID NO: 21, and SEQ ID NO: 37, or which hybridizes to said nucleic acid molecule under stringent conditions.

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44. The isolated nucleic acid molecule according to claim ⁴⁰36 which encodes an extracellular domain of an OCIL or of an OCIL-related protein.

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45. The isolated nucleic acid molecule according to claim ⁴⁰36, which inhibits differentiation of haematopoietic stem cells to osteoclast pregenitor cells.

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46. The isolated nucleic acid molecule according to claim ⁴⁰36 which comprises 110 base pair sequence as set out in SEQ ID NO: 2.

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47. An isolated nucleic acid molecule directed against a nucleic acid molecule according to claim ⁴⁰36.

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48. The isolated anti-sense nucleic acid molecule according to claim ⁵¹47 directed against SEQ ID NO: 10.

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49. The isolated nucleic acid molecule according to claim ⁵¹47, which is SEQ ID NO: 24 or SEQ ID NO: 25.

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50. An isolated polypeptide encoded by the nucleic acid molecule of claim ⁴⁰36.

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51. An antibody directed against the polypeptide of claim ⁵⁴50.

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52. A method of treatment of a condition characterized by abnormal bone resorption, comprising administering an effective amount of a modulator of expression or function of the polypeptide according to claim ⁵⁴50.

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53. A method of modulating breast and/or lymph node development, comprising administering an effective amount of a modulator of expression or function of a polypeptide according to claim ⁵⁴50 to a subject in need of such treatment.

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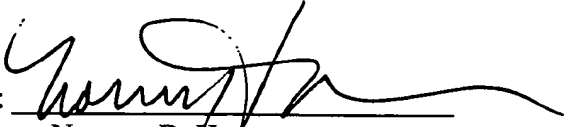
An isolated oligonucleotide primer selected from the group consisting of sense primers having the nucleotide sequence set out in SEQ ID NO: 5, 6, 30, 35, 13, 14, 16, 18, 27, 47, 50, 52, 54, or 55, and antisense primers having the nucleotide sequence set out in SEQ ID NO: 3, 31, 32, 14, 28, 34, 38, 39, 51, 53, 22, 23, 24, 25, 43 or 56.

REMARKS

Entry of the amendment is requested.

Respectfully submitted,

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